



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,849	12/29/2000	Peter Graham Craven	DOL06504-US	6732

7590 04/13/2006  
Gallagher & Lathrop  
Suite 1111  
601 California Street  
San Francisco, CA 94108-2805

EXAMINER

TIV, BACKHEAN

ART UNIT	PAPER NUMBER
----------	--------------

2151

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/720,849

Applicant(s)

CRAVEN ET AL.

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2/2/06 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/2/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,4,16-21,25,29,31-33 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,4,16-21,25,29,31-33 and 45-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action***

Claims 3,4,16-21, 25,29,31-33,45-50 are pending in this application. Claims 1,2,5-15,22-24,26-28,30,34-44 have been cancelled. This is a response to the Remarks/Amendment filed on 2/2/06.

***Priority***

Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in the United Kingdom on 7/3/1998(United Kingdom 9814513.9) and 4/7/1999(United Kingdom 9907918.8). The applicant has not provided a certified copy of United Kingdom 9814513.9.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3,4,16-21, 25,29,31-33,45-50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54

of U.S. Patent No. 6,023,233 issued to Craven et al.(Craven) in view of US Patent 5,617,145 issued to Huang et al.(Huang).

US Patent 6,023,233 issued to Craven teaches all the limitations of the instant application except for a minimum data rate. Craven however, suggest the use of predetermine data rate.

Huang explicitly teaches a minimum data rate(col.6, lines 59-col.7, line 45).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Craven use a minimum data rate taught by Huang in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Craven and Huang in order to provide a process of encoding/decoding data at different data rates.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,4,16-18,21, 25,29,31,32,50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 5,617,145 issued to Huang et al.(Huang) in further view of US 5,377,051 issued to Lane et al.(Lane).

As per claim 3, 25, Naimpally teaches an encoder for producing an encoded packetised stream(Abstract), including comprising :  
means for determining data rate to which the packetised stream could be decoded having given first-in-first-out (FIFO) buffer size(col.5, lines 42-62); and

Naimpally however does not explicitly teach determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum.

Huang teaches determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum(col.6, lines 59-col.7, line 45).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum as taught by Huang in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Huang in order to provide a process of encoding/decoding data at different data rates.

Naimapally in view of Huang does not explicitly teach repacketised data.

Lane explicitly teaches repacketised data(col.50, lines 41-48).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally in view of Huang to explicitly teach

Art Unit: 2151

repacketised data as taught by Lane in order for a decoder to recognize a stream of data packets(Lane, col.50, lines 41-48).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Naimpally, Huang, and Lane to provide a system to recognize a stream of data packets(Lane, col.50, lines 41-48).

As per claim 4, 29,47 wherein the encoded stream is losslessly compressed digital audio data(Naimpally, col.1, lines 35-67).

As per claim 16, A mastering system comprising the encoder as claimed in claim 3(Naimpally, Fig.1-3).

As per claim 17, a system comprising a mastering system as claimed in claim 16, and means for repacketising the data to form, a stream having a peak data rate calculated in dependence upon the control data(Huang, Figs.2-9). Motivation to combine set forth in claim 3.

As per claim 18, a system as claimed in claim 17, wherein the stream having a peak data rate corresponding to the control data comprises a fixed rate stream(Huang, col.2, lines 34-44). Motivation to combine set forth in claim 3.

As per claim 21, a system as claimed hi any one of claims 17 to 20, wherein the encoder comprises an MLP lossless encoder for audio data(Naimpally, col.3, lines 31-60).

As per claim 31, the data processing method of claim 25, further comprising processing the control data to determine an adequate bandwidth for transmission of the encoded variable rate stream, and transmitting the encoded variable rate stream over

an interface having at least the adequate bandwidth(Huang, col.1, lines 39-56).

Motivation to combine set forth in claim 3.

As per claim 32, the data processing method of claim 31 wherein the interface operates at a fixed data rate(Huang, col.1, lines 39-56). Motivation to combine set forth in claim 3.

As per claim 50, a decoder that decodes the encoded variable rate steam that includes said control data as provided by claim 25(Naipally, Abstract, col.5, lines 42-61).

Claims 19,20,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naipally in view of US Patent 5,617,145 issued to Huang et al.(Huang) in further view of US 5,377,051 issued to Lane et al.(Lane) in further view of US Patent 6,009,229 issued to Kawamura.

Naipally in view of Huang in further view of Lane teaches all the limitations of claim 3,25, however, does not explicitly teach as per claim 19, 20, 33 a system for providing encoded data to a DVD comprising a mastering system and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder.

Kawamura teaches a system for providing encoded data to a DVD comprising a mastering system as claimed in claim 16, and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder(Figs. 1-22,col.1, lines 14-col.2, lines 23).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teaching of Naimpally in view of Huang in further view of Lane to use a DVD to encode data as taught by Kawamura in order to store more data than that of other media.

One ordinary skill in the art would have been motivated to combine the teachings of Naimpally, Huang, Lane, and Kawamura in order to provide a process to encode MPEG files on a DVD.

Claims 45-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 5,617,145 issued to Huang et al.(Huang) in further view of US Patent 5,675,383 issued to Yagasaki et al.(Yagasaki).

As per claim 45, Naimpally teaches a device for decoding variable rate data organized as a stream of packets, each packet including a corresponding decoder time stamp(Abstract), the device comprising: a FIFO buffer having an input coupled to the feed buffer for receiving the stored data, and having an output(Abstract, col.1, lines 21-34); and a decoder having an input coupled to the output of the FIFO buffer(Abstract, col.1, lines 21-34).

Naimpally however does not explicitly teach a buffer that receives the stream of packets to mitigate any interruption in the stream of packets.

Huang teaches a buffer that receives the stream of packets to mitigate any interruption in the stream of packets(Abstract, Fig.1-9).



Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to a feed buffer that receives tire stream of packets to mitigate any interruption in the stream of packets as taught by Huang in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Huang in order to provide a process of encoding/decoding data at different data rates.

Naimpally in view of Huang does not explicitly teach a feed buffer.

Yagasaki explicitly teach a feed buffer(Fig.1, element 2).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally in view of Huang to explicitly teach a feed buffer as taught by Yagaski in order to operate as FIFO memory(Yagasaki, col.2, lines 15-18).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Naimpally, Huang, and Yagasaki in order to provide a system capable of implementing a FIFO memory(Yagasaki, col.2, lines 15-18).

As per claim 46, the device of claim 45, wherein the feed buffer stores the stream until the corresponding decoder time stamp for each packet is identified(Naimpally, Abstract).

As per claim 47 wherein the encoded stream is losslessly compressed digital audio data(Naimpally, col.1, lines 35-67).

As per claim 48, wherein the encoder comprises an MLP lossless encoder for audio data(Naimpally, col.3, lines 31-60).

As per claim 49, the device of claim 45, wherein the decoder is an MLP decoder(Naimpally, Abstract).

### ***Response to Arguments***

Applicant's arguments with respect to claim 3,4,16-21, 25,29,31-33,45-50 have been considered but are moot in view of the new ground(s) of rejection.

The applicant's argument concerning the 371 priority and the United Kingdom 9907918.8 is persuasive, however, the applicant has not provided a certified copy of United Kingdom 9814513.9. The examiner must consider if United Kingdom 9814513.9 contains the same subject matter as this instant application.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

US Patent 5,623,490 issued to Richter et al.

US Patent 5,455,841 issued to Hazu

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571)272-3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

Art Unit: 2151

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Backhean Tiv  
2151  
4/9/06



**ZARNI MAUNG**  
**SUPERVISORY PATENT EXAMINER**